

ABSTRACTS

This section of the JOURNAL is published in collaboration with the two abstracting Journals, ABSTRACTS OF WORLD MEDICINE and OPHTHALMIC LITERATURE, published by the British Medical Association. The abstracts are divided into the following sections: Syphilis (Clinical, Therapy, Serology, Pathology, Experimental), Gonorrhoea, Non-Gonococcal Urethritis and Allied Conditions, Chemotherapy, Public Health and Social Aspects, Miscellaneous. After each subsection of abstracts follows a list of articles that have been noted but not abstracted. All subsections will not necessarily be represented in each issue.

SYPHILIS (Clinical)

Study of Acquired Childhood Syphilis in Madras. RAJAM, R. V., RANGIAH, P. N., and SOWMINI, C. N. (1955). *Indian J. Derm. Venereol.*, 21, 117. 6 figs, 8 refs.

A detailed study is presented of acquired syphilis in childhood, 385 cases of which were seen over the 7-year period 1948 to 1954 at the Government General Hospital, Madras. In 69 per cent. of the cases the source of the infection was familial; the authors state that it was not uncommon in a single family to find inherited syphilis in an infant and non-venereal acquired syphilis in older children. The lesions were usually on the skin and mucous membranes of the mouth and anogenital regions; the primary chancre was seldom observed. The health of the children did not appear to suffer much, and bone lesions were rare. The late lesions were benign and no evidence of involvement of the cardiovascular or nervous system was found in any of the cases in the series. The condition responded rapidly to treatment with penicillin.

[This paper will prove of interest mainly to those concerned with the treatment of the treponematoses in the tropics although cases of acquired syphilis in childhood are occasionally seen in Britain.] *Robert Lees*

Some Observations on the Course of Treated Syphilitic

Primary Optic Atrophy. HAHN, R. D., ZELLMANN, H. E., NAQUIN, H., CROSS, E. S., and MARCUS, D. M. (1955). *J. chron. Dis.*, 1, 601. 9 figs, 20 refs.

The course of treated syphilitic primary optic atrophy has been studied in 233 cases at Johns Hopkins Hospital, Baltimore. Because of the relatively small number of patients and the varying treatment previously given, it was impossible to consider each form of therapy separately. For the purposes of this study the patients were divided into five groups according to the regimen followed after they were first seen at the hospital:

- (1) no treatment;
- (2) metallothérapie;
- (3) malaria therapy, with or without metallothérapie;
- (4) penicillin and malaria therapy;
- (5) penicillin without malaria therapy.

Only patients with initial visual acuity greater than

10/200 were included, "thus eliminating the fallacy of considering non-progression of an 'industrially blind' patient as a treatment success".

It was found that in patients with initial visual efficiency of more than 40 per cent. the rate of progression was significantly slower than in those with initial visual efficiency of 40 per cent. or less, and the authors [justifiably] attribute this largely to the treatment given. Of 141 patients followed up after receiving various forms of antisyphilitic treatment, one-third showed progression of the disease during the first year, one-half at 2 to 3 years, and two-thirds at 4 to 5 years. The rate of progression after treatment did not appear to be significantly influenced by the spinal-fluid cell count before treatment started. The authors state that the results in these cases may have been influenced to a variable degree by previous treatment given elsewhere, which also precluded accurate comparison of the treatment regimens used. Further, to estimate the efficacy of treatment in any disease the prognosis in the absence of such treatment should be known; this is not known in the case of syphilitic optic atrophy. They emphasize the difficulty of attempting evaluation of treatment in a chronic variable disease in the absence of untreated controls.

A. J. Gill

Amyotrophic Lateral Sclerosis and Syphilis. (Sclerose laterale amyotrophique et syphilis.) CORDIER, J. (1955). *Acta neurol. psychiat. belg.*, 55, 998. 5 figs, 15 refs.

Problem of Latent Syphilis. (O problema da sífilis latente.) BRANDÃO, N. (1955). *J. Méd. (Porto)*, 28, 983.

Lues of the Colon. BASSÖE, H. H. (1955). *Amer. J. Roentgenol.*, 74, 865. 2 figs, 7 refs.

Decline and Fall of Syphilis in New York State. III. Early Acquired Syphilis. VOUGHT, R. L., MELLO, L. DE, and LOCKE, F. B. (1955). *J. chron. Dis.*, 2, 303. 3 figs, 3 refs.

Mortality in Australia from Syphilis. LANCASTER, H. O. (1955). *Med. J. Aust.*, 2, 895. 1 ref.

SYPHILIS (Therapy)

Hypertherm Treatment of Neurosyphilis. Methods of Evaluation and Prognostically Important Factors. [In English.] ARENTSEN, K., and WELNER, J. (1955). *Acta psychiat. neurol. scand.*, **30**, 529. 20 refs.

In an attempt to evaluate the results of hyperthermia in the treatment of neurosyphilis and to assess the value of its combination with penicillin therapy, the authors have reviewed 369 cases treated between 1943 and 1953 at the University Psychiatric Clinic, Rigshospitalet, Copenhagen. They do not claim that these cases were fully representative of neurosyphilis as it occurs in Denmark, as patients with severe psychic symptoms would usually be referred direct to a mental hospital. Furthermore, the authors find it extremely difficult to compare their results with those of other authors as the criteria of diagnosis, examination, treatment, and ultimate evaluation of results vary widely. To ensure a uniform standard of assessment they selected only those cases in which a psychiatric and neurological examination, an evaluation of the patient's working capacity, and an examination of the cerebrospinal fluid had been made before and at least 6 months after treatment, only 194 cases (five of which were of congenital syphilis) being retained out of the 369. Of these, only one-third had fairly severe symptoms, and only one-half were wholly or partly disabled. An assessment of each patient's condition on clinical, social, and humoral grounds was made at least 6 months after the first course of treatment (after an average period of observation of 15 months) and again after completion of treatment (after a period of observation ranging from less than 2 years to more than 10 years and averaging 4 to 5 years),

The first course of treatment consisted in hyperthermia alone in 101 cases, hyperthermia with penicillin in 73, and penicillin alone in twenty. Each course of hyperthermia consisted of about ten treatments at a body temperature of 40° C. (104° F.) for a total of 30 hrs. Each course of penicillin lasted 18 to 21 days, the total dose being at least 6, usually 10, and in a few cases more than 48 mega units. Further courses of treatment were given as indicated by the results of the first assessment, with the result that on completion of treatment 58 patients had received hyperthermia alone, 119 combined treatment, and seventeen penicillin alone.

The conclusion arrived at is that combined treatment of neurosyphilis with hyperthermia and penicillin is in no way superior to hyperthermia alone. On clinical, social, and humoral grounds the results were fairly uniform within each diagnostic category of neurosyphilis and were generally better when treatment was started early. The authors also conclude that the prognosis can usually be determined after the first course of treatment and that further courses do not materially improve the patient's fate.

Douglas J. Campbell

P.A.M. in Early Syphilis. (P.A.M. en la sífilis precoz.) CASAUX, A. CARRILLO. (1955). *Act. dermo-sifiliogr. (Madr.)*, **47**, 210.

Treatment of Syphilis with Antibiotics. (Le traitement de la syphilis par les antibiotiques.) BORY, L. (1955). *Thérapie*, **10**, 849. Bibl.

SYPHILIS (Serology)

Diagnosis of Syphilitic Cardiovascular Disease with Special Reference to Treponemal Immobilization Tests. FRIEDMAN, B., and OLANSKY, S. (1955). *Amer. Heart J.*, **50**, 323. 6 refs.

Though it is well known that undoubted late manifestations of cardiovascular syphilis sometimes occur in patients whose blood fails to give positive reactions to the usual serological tests, it sometimes happens that it is difficult to diagnose this condition in the absence of collateral evidence of syphilitic infection.

The present report deals with the results of the treponemal immobilization (TPI) test on sera from 33 patients with lesions of the aorta or aortic valves on which the standard serum tests for syphilis (STS) gave either negative or only weakly positive reactions. The cases were classified on the basis of the history and the clinical impression after examination as

- (1) syphilitic,
- (2) non-syphilitic,
- (3) due to an unknown or uncertain cause.

The results of testing were as follows.

Aetiology	No. of Cases	STS		TPI Test	
		Negative	Doubtful	Positive	Negative
Syphilitic ..	12	9	3	9	3
Non-syphilitic ..	12	12	0	0	12
Uncertain ..	9	8	1	4	5

(It is interesting to note that treponemal immobilizing antibodies were detected in the blood of patients with cardiovascular syphilis 26 to 43 years after the original infection although the STS gave negative results.)

The authors [rightly] conclude that the TPI test is of definite help in establishing the existence of syphilis in patients with negative STS reactions.

G. L. M. McElligott

Treponema pallidum Immobilization Test (TPI Test) of Nelson and Mayer in Human Syphilis. Part II: Parallelism of TPI Test Results with those of Classical Serological Tests. (Risultati ed osservazioni sul test di immobilizzazione del treponema pallidum secondo Nelson e Mayer (T.P.I. test) nella sifilide umana. Nota 2ª: Parallelo dei risultati del T.P.I. test e sierologia classica.) BELLONE, A. G., and BONELLI, M. (1955). *G. ital. Derm.*, **96**, 536. 5 tables, 6 refs.

The authors, working at the University of Milan, compare the results of examining 529 sera by the TPI test with those of "classical tests" using one complement-fixation test with cardiolipin antigen and another with a suspension of Reiter treponemes (TL antigen), as well as the Sachs-Witebsky and MKR II flocculation tests. In ninety out of 91 cases with strongly positive classical tests the TPI test was positive, the negative occurring in a case of primary syphilis. The TPI test was positive in 37 out of forty syphilitic sera in which

the TL antigen complement-fixation test was positive but all the other tests negative. The authors conclude that the classical serological tests, particularly with purified antigens, retain their value and that when they are "strongly positive" control by means of the TPI test is unnecessary: The TPI test is a necessary and valuable aid where there is discrepancy between the results of the classical tests or when a biological false positive reaction is suspected.

Eric Dunlop

Serological Survey for the Detection of Syphilis in 21,437

Recruits. (Enquête sérologique en vue du dépistage de la syphilis chez 21,437 recrues.) DUTREY, —, OLIVIER, —, BÉNAZET, —, and REBOUL, —. (1955). *Presse méd.*, 63, 1027. 1 ref.

Routine serological tests for syphilis were carried out on 21,437 recruits called up for military service with the French army during the period 1952–54. The majority were 20 years old, but the series included a small number of men aged 23 to 25. The recruits came from both rural and urban areas and represented all social classes in Metropolitan France. The Kline exclusion test or the Meinicke micro-reaction were used as screening tests, and all reactive sera were then subjected to the standard Kahn and Kline tests and the Debains and Kolmer complement-fixation tests. Men whose serum gave a positive reaction with one or more of the standard tests were investigated clinically and a treponemal immobilization (TPI) test was carried out on a further specimen of serum.

The screening test gave positive reactions in 124 cases (0.57 per cent.), but positive reactions with one or more of the standard tests were obtained with only 32 of these sera. Of these 32 sera, twelve gave a positive and one a doubtful reaction to the TPI test. Thus on the basis of the results of the TPI test the incidence of syphilis revealed by the survey was 0.06 per cent. (thirteen cases). Of these thirteen patients, one had secondary lesions (the TPI reaction being doubtful in this case), four had a history suggestive of recent early lesions, two had latent congenital syphilis, and six had no clinical evidence or history of syphilis.

The very low incidence of syphilis noted is attributed to the men's average age, to their having been born at a time when measures against syphilis were becoming effective (thus reducing the incidence of congenital infection), and to the probable rejection for service of men with overt congenital lesions. In contrast, a similar survey of a small number (346) of North African recruits showed the incidence of syphilis among them to be much higher (4.9 per cent.).

Of those cases in which all four of the standard tests gave a positive result, the TPI reaction was positive in all but one, and in this case a positive result was obtained on examination of a second specimen of serum. On the other hand, of the 22 cases in which the results of the standard tests were only weakly positive or dissociated, only three gave a positive TPI reaction. A possible cause for non-specific serum reactions was found in only one case, in which the patient was found to have virus pneumonia.

A. E. Wilkinson

Response to the Nelson Test in Sero-negative Cases of Apparently Syphilitic Aortitis. (Les réponses du test de Nelson dans les aortites séro-négatives d'allure syphilitique.) JOUVE, A., RANQUE, J., TRAMIER, C., and ALBOUY, M. (1955). *Sem. Hôp. Paris*, 31, 3087. 13 refs.

The treponemal immobilization (TPI) test of Nelson was performed on sera from 53 patients with various cardiac and aortic lesions which had aroused suspicions of syphilis but in whom the serological tests for syphilis (STS) gave negative results. Only in twelve cases was the TPI reaction positive. Six of the 53 patients had a previous history of syphilis or suggesting syphilis, the TPI reaction being positive in three of these and negative in the remaining three, all old treated cases. Out of 36 of the patients who were personally examined by the authors and in whom the clinical and radiological evidence supported the diagnosis of a syphilitic aetiology, only six gave a positive TPI reaction. No correlation could be established between a positive reaction to the TPI test and the presence of any particular clinical or radiological sign, none of which appeared to be specific.

A serological survey was also carried out on a further group of fifty patients who were selected from those attending a cardiological clinic as having either marked aortic dilatation or segmental aortitis of the first part of the aorta, with or without aortic valvular insufficiency. Of these, 25 were found to be STS-positive and 25 STS-negative, the distribution of the types of lesion being almost the same in the two subgroups. The TPI test was carried out on only fourteen of the sero-negative patients, four of whom gave a positive reaction. Thus serological evidence of syphilis was found in only 29 of 39 cases of aortic disease selected on clinical and radiological grounds as typically syphilitic (excluding the eleven cases in which the serological investigations could not be completed).

The presence of cardiovascular syphilis is considered by the authors to be improbable in the absence of a positive TPI reaction, the cause of the aortic lesions in such cases remaining uncertain. The persistence of immobilizing antibody after treatment makes the interpretation of the combination of a positive TPI reaction with negative STS reactions difficult, since it is always possible that this combination may be found in an old treated syphilitic whose aortic lesion is due to some cause other than syphilis.

A. E. Wilkinson

Cardiolipin Antigen. VIII. Course of and Mutual Relations between Various Seroreactions in Syphilis-infected Rabbits. [In English.] SCHMIDT, H. (1955). *Acta path. microbiol. scand.*, 37, 252. 6 figs, 31 refs.

Cardiolipin and Lecithin in Meinicke's Clarification Test. II. KORNSTAD, L. (1956). *Acta path. microbiol. scand.*, 38, 123. 13 refs.

Trial of Balsam of Tolu for Fitness for Use in the Meinicke Antigen for Syphilis Tests. HALVORSEN, K. (1956). *Acta path. microbiol. scand.*, 38, 119. 1 fig., 4 refs.

Influence of Certain Physical and Chemical Factors on the Serological Reactions in Syphilis. The Case of the Kline Reaction. (Influence de quelques facteurs physico-chimiques sur les réactions sérologiques de la syphilis. Cas de la réaction de Kline.) PAUTRIZEL, R., SZERSNOVICZ, F., and FAURE, M. (1955). *Ann. Inst. Pasteur*, **89**, 621. 11 refs.

Experience with the VDRL Microflocculation Reaction for the Serological Diagnosis of Syphilis. (Esperienze con la microreazione di flocculazione V.D.R.L. per la diagnosi sierologica della sifilide.) VALERIO, V., and FRANCIOSI, A. (1956). *Rif. med.*, **70**, 93.

About the Practical Value of the Test after Nelson and Mayer. KOGOJ, F. (1955). *Indian J. Derm. Venereol.*, **21**, 189.

Confirmatory Tests for Syphilis. (Pruebas de verificación para lúes.) CASTILLON, F. G. (1956). *Rev. Diagn. biol. (Madr.)*, **5**, 1. Bibl.

SYPHILIS (Pathology)

Addendum to the Histopathological Findings of Juvenile General Paresis—on the Mechanism of Development of Polynuclear Nerve Cells. TSUYUKI, S. (1955). *Folia psychiat. neurol. jap.*, **9**, 135. 23 figs, 25 refs.

GONORRHOEA

Erythromycin in Combination with Triple Sulfonamides in the Treatment of Acute Gonorrhea in the Male. MARMELL, M., SHIDLOVSKY, B. A., and PRIGOT, A. (1955). *Antibiot. Med.*, **1**, 450. 4 refs.

At the Harlem Hospital, New York, 140 males with acute gonorrhoea were treated with erythromycin combined with three sulphonamides, sulphadiazine, sulphamerazine, and sulphadimidine (sulphamethazine). The drugs were given in tablet form, and in the four treatment schedules used the total dose of erythromycin ranged from 0.6 to 2 g. and that of the combined sulphonamides from 1.5 to 3 g., this total dose being administered in equal amounts at 6-hourly intervals. Of the 140 patients, only 93 returned for follow-up examination. The best results were obtained with a dosage of 2 g. erythromycin and 3 g. of the sulphonamides, 24 out of 26 patients being cured. It is suggested that the sulphonamides increase the activity of the antibiotic because the cure rate with 1.2 g. erythromycin and 3 g. of the sulphonamides was the same as that obtained in a previous investigation with 2 g. erythromycin alone. Only three patients in the series experienced minor toxic reactions—one had nausea and two had loose stools.

A. Fessler

Treatment of Gonorrhoea with Intramuscular Tetracycline. PERKINS, H. A., KOCH, R. A., GARA, G., STEPHENS, W. W., and DAVID, W. D. (1955) *Antibiot. Med.*, **1**, 504. 2 refs.

At the San Francisco City Public Health Clinic 87 patients with acute gonorrhoea were treated with from

one to six intramuscular injections each of 200 mg. tetracycline given at intervals of 12 to 24 hrs. As seventeen of these patients failed to return after the first injection and two had subsequently to be given penicillin because of side-reactions to tetracycline, this left 68 patients who returned for one re-examination and urethral culture, of whom 36 were also seen on a second occasion.

Out of fifteen cases given one injection there were ten failures, and out of twelve given two injections there were seven failures, but there were no failures among the 41 patients receiving from three to six injections.

However, an extreme degree of local discomfort followed the injections and it is not considered that tetracycline given intramuscularly will, in its present form, replace penicillin in the treatment of gonorrhoea.

R. R. Willcox

Treatment of Gonorrhea with Oxytetracycline Intramuscular. GOODLOE, O. M., and ROTH, L. J. (1956). *Ohio St. med. J.*, **52**, 34.

Four Years' "Reform of Compulsory Treatment of Gonorrhoea in Women." (Vier Jahre "Reform der Zwangsbehandlung gonorrhoekrankter Frauen.") LANDES, E. (1956). *Medizinische*, No. 5, 192. 3 refs.

Presence of Neisseria gonorrhoeae and Pleuro-pneumonia-like Organisms in the Cervix Uteri. SOMERSON, N. L., RUBIN, A., SMITH, P. F., and MORTON, H. E. (1955). *Amer. J. Obstet. Gynec.*, **69**, 848. 15 refs.

Neonatal Blennorrhoea. (Blennorrhoea neonatorum.) SMIT, J. A., and VAN WERING, R. F. (1955). *Ned. T. Geneesk.*, **99**, 3680.

Post-gonorrhoeal Impotence in the Male. SHAH, J. M. (1955). *J. Pakist. med. Ass.*, **5**, 103. 3 refs.

NON-GONOCOCCAL URETHRITIS AND ALLIED CONDITIONS

Trichomonas vaginalis Infection in the Male. COUTTS, W. E., VARGAS-SALAZAR, R., SILVA-INZUNZA, E., OLMEDO, R., TURTELTAUB, R., and SAAVEDRA, J. (1955). *Brit. med. J.*, **2**, 885. 4 figs, 26 refs.

The morphology, staining characteristics, and pathogenicity of *Trichomonas vaginalis* are described, with dark-ground photomicrographs showing the protozoon undergoing division. The authors then report that of 8,329 cases of urethritis in males seen at the University of Chile Urological Clinic and Antivenereal Policlinics, 5,847 were gonococcal and 2,482 (29 per cent.) were non-gonococcal. *T. vaginalis* was found in 1,690 (68 per cent.) of the latter group, of which 262 were cases of acute infection. The incubation period of acute trichomonal urethritis is 3 to 8 days and the urethral discharge may be slight or abundant and purulent as in gonorrhoea. Painful erections are sometimes encountered, as is also involvement of the posterior urethra, prostate, and occasionally the epididymis.

Chronic infection is common. *T. vaginalis* has been recovered by the authors from the urethra or prostate

of 40 per cent. of husbands whose wives carried the parasite. Some of these patients had a urethral discharge and some had not, but most of them had threads in the urine. It is believed that presence of the organism may cause ejaculatio praecox. Three cases of epididymitis were observed in which trichomonads were recovered from scrapings of the epididymal canal. Trichomonal cystitis may occur in both sexes, and latent (subclinical) infection and the carrier state are not infrequently encountered. Of 1,561 cases of post-gonococcal urethritis, *T. vaginalis* was recovered from 25 per cent. (non-specific spirochaetes in 1.9 per cent.). The authors have observed two cases following buccal coitus with a prostitute who was probably harbouring in her mouth living parasites which she had acquired from a previous client. They have also observed free, brilliant green, rounded bodies, as well as single but smaller intracythrocytic inclusions of the same colour, in the blood of two patients with severe *T. vaginalis* infection and cystitis.

In uncomplicated cases of acute trichomonal urethritis local treatment is recommended; the authors have used "argyrol", acriflavine, thiomersalate, nitrofurantoin derivatives, and aureomycin (they state that nearly one hundred substances have been recommended in the literature). In chronic cases systemic treatment with emetine, nitrofurantoin derivatives, aureomycin, erythromycin, or preparations of mandelic acid is suggested in addition.

R. R. Willcox

Examination of the Prostatic Secretion for Leucocytes.

HORNE, G. O. (1955). *Brit. J. Urol.*, 27, 61.

As a result of the analysis of 185 cases it is concluded that in investigating the prostatic secretion for the presence of leucocytes following prostatic massage examination of the prostatic "bead" alone is inadequate. The urine passed after prostatic massage must also be examined. Provided the prostatic secretion is not allowed to drain away, examination of the prostatic urine alone is adequate. Provided the patient does not have a urethral discharge and that at least 3 fl. oz. urine are passed immediately before the gland is massaged it is unlikely that the prostatic secretion will be contaminated from the urethra, and preliminary irrigation of the urethra is not necessary. In the interpretation of the prostatic urine care must be taken to eliminate contamination with leucocytes from the bladder and upper urinary tract.

Author's Summary

Abacterial Urethritis, Abacterial Pyuria, and Reiter's Syndrome.

GOLDEROS, A. F. (1955). *J. Urol.*, 73, 536. 12 refs.

The author has treated a number of cases of Reiter's syndrome with mapharside, 0.06 g. every fifth day for 10 to 15 doses, together with polyvitamins and an ample dietary regimen. Some of the cases had previously been unsuccessfully treated with antibiotics. One case had persistent conjunctivitis and iritis affecting one eye.

Good results appear to have followed this line of treatment and no recurrences are reported.

J. R. Hudson

Keratosi Blennorrhagica: Report of Two Cases Successfully treated with Corticotropin (ACTH).

IKEJIANI, O. (1955). *W. Afr. med. J.*, 4, 196. 6 figs, 20 refs.

Abacterial Cystitis: a Review, including a Report of Eleven Cases.

HORNE, G. O. (1955). *Brit. J. Urol.*, 25, 195. 49 refs.

CHEMOTHERAPY

Penicillin V, a New Type of Penicillin: Preliminary Clinical and Laboratory Observations.

MARTIN, W. J., NICHOLS, D. R., and HEILMAN, F. R. (1955). *Proc. Mayo Clin.*, 30, 467. 6 refs.

In this preliminary report the encouraging results obtained with phenoxymethylpenicillin ("penicillin V") in the treatment of thirty patients suffering from various infections are described. The drug was readily absorbed when given by mouth, detectable amounts being present in the serum 4 hrs after an oral dose of 200,000 units. Patients with minor, moderate, or fairly severe infections received, respectively, 200,000, 400,000, and 800,000 units every 4 hrs. The authors state that patients with the most severe infections were not treated with phenoxymethylpenicillin alone, but they believe that doses up to 2,000,000 units may be given. The antibiotic induced few local reactions, but it is pointed out that it may cause the serious systemic reactions occasionally associated with administration of benzylpenicillin. As the authors conclude, it appears that many infections which have hitherto been treated by parenteral administration of penicillin may now be treated with phenoxymethylpenicillin by mouth.

J. E. Page

Study of the Allergic Reactions to 24,854 Injections of Penicillin and of the Value of the Latter in the Prevention of Syphilis and Gonorrhoea. (Un estudio de las reacciones alérgicas a la penicilina en 24,854 inyecciones y del valor profiláctico de ellas en la prevención de las sífilis y gonorrea.)

FÁBREGA, R. D. (1955). *Arch. méd. panameñ.*, 4, 65. 5 refs.

The author has studied a group of prostitutes who received prophylactic injections of penicillin at the Social Hygiene Dispensary, Panama City, during the 20-month period between September, 1952, and April, 1954, each woman receiving 600,000 units PAM weekly (later reduced to 300,000) in a single intramuscular injection; in all 24,854 prophylactic injections were given. The number of allergic reactions occurring in the first 5 months of the study was compared with those in the last 5 months. During these periods the average weekly attendances were 250 and 310 respectively, and numbers of allergic reactions 134 and 34 respectively. From his calculations [of doubtful validity] and on the assumption that no additional allergic reactions occurred in the intervening 10 months [for which no details are given] the author concludes that allergic reactions occur in between 9 per cent. and 11 per cent. of patients and after 0.6 per cent. of injections. When reactions did occur they were controlled by the administration of antihistamines and in no case did the prophylactic